

December 2, 1997

F/SWC2:MPC:FLF
CR9711-3.MPC

CRUISE REPORT

VESSEL: *Townsend Cromwell*, Cruise 97-11 (TC-226)

CRUISE PERIOD: October 17-November 11, 1997

AREA OF OPERATION: Northwestern Hawaiian Islands (Fig. 1)

TYPE OF OPERATION: Personnel from the Southwest Fisheries Science Center (SWFSC) Honolulu laboratory, National Marine Fisheries Service (NMFS), NOAA, Hubbs Sea World Research Institute (HSWRI), and the U.S. Fish and Wildlife Service (USFWS) deployed satellite-linked time-depth recorders (SLTDR's) on 24 Hawaiian monk seals at Pearl and Hermes Reef (PH). Also at PH, NMFS and NOAA personnel surveyed marine debris within the atoll and began debris collection. USFWS personnel and supplies were delivered from Honolulu and Midway Atoll to French Frigate Shoals (FFS) and Laysan Island. USFWS personnel continued toxicological sampling of sand at Laysan Island. Assisted transport of a large telescope for astronomical observations for Marc Buie of the Lowell Observatory, Flagstaff Arizona.

ITINERARY:

- 17 October - Start of cruise. On board were Ray Boland, Mitch Craig, Chris Depkin, Charles Monnett, Kevin O'Leary, Vanessa Pepi, Kim Raum-Suryan, Melissa Shaw, and Brent Stewart. Departed Snug Harbor at 0800 and proceeded to FFS.
- 19 October - Arrived FFS.
- 20 October - Disembarked O'Leary, USFWS supplies, and telescope. Departed FFS.

- 22 October - Arrived Laysan Island. Disembarked Depkin and Pepi and USFWS supplies. Departed Laysan Island.
- 23 October - Arrived PH.
- 24 October - Disembarked Craig, Monnett, Raum-Suryan, and Shaw. Began SLTDR deployment and marine debris surveys and collection.
- 03 November - Ended SLTDR deployment and marine debris surveys and collection. Embarked Craig, Monnett, Raum-Suryan, and Shaw. Departed PH.
- 04 November - Arrived Midway Atoll.
- 05 November - Embarked Elizabeth Mitchell and Lee Ann Woodward. Loaded gasoline and USFWS equipment. Departed Midway Atoll.
- 07 November - Arrived Laysan Island. Disembarked Mitchell and temporarily disembarked Woodward (for toxicological sampling). Embarked Catherine McMahan, Hadie Muller, and Woodward. Departed Laysan Island.
- 09 November - Arrived FFS. Off-loaded gasoline and loaded telescope, equipment, samples, and trash. Departed FFS.
- 11 November - Arrived Snug Harbor, Honolulu at 2130. Disembarked all personnel. End of cruise.

MISSIONS AND RESULTS:

- A. Support scientists attaching SLTDR's to Hawaiian monk seals at PH.

Nine adult males, 9 adult females, and 6 juvenile males were instrumented. Blood samples were collected and processed, and length and girth measurements were collected from these seals.

- B. Survey and remove marine debris from within the lagoon at Pearl and Hermes Reef.

1. Surveys were 5 transects, 3-7 kilometers long and about 10 meters wide each inside the lagoon at the north, south, east, west, and middle (Fig. 2).
2. Approximately 1300 kg of dry weight of marine debris were removed.

- C. Transport USFWS personnel, field equipment, and supplies to and from Honolulu, FFS, Laysan Island, and Midway Atoll.
1. Four USFWS personnel were disembarked at FFS and Laysan Island from Honolulu and Midway. Fuel, food, equipment, water and supplies were also delivered to FFS, Laysan Island, and Midway Atoll for the USFWS.
 2. A telescope was delivered to and collected from FFS for Marc Buie of the Lowell Observatory, Flagstaff Arizona.
 3. A USFWS ecotoxicologist collected sand samples from Laysan Island.

**SCIENTIFIC
PERSONNEL:**

Mitchell Craig (October 17-November 5) Chief Scientist, Joint
Institute of Marine and Atmospheric Research (JIMAR)
Ray Boland (November 5-November 11), Chief Scientist, (JIMAR)
Chris Depkin, Cooperating Scientist, U.S. Fish and Wildlife
Service (USFWS)
Catherine McMahon, Cooperating Scientist, USFWS
Elizabeth Mitchell, Cooperating Scientist, USFWS
Charles Monnett, Cooperating Scientist, USFWS
Hadie Muller, Cooperating Scientist, USFWS
Kevin O'Leary, Cooperating Scientist, USFWS
Vanessa Pepi, Cooperating Scientist, USFWS
Kim Raum-Suryan, Cooperating Scientist, JIMAR
Melissa Shaw, Cooperating Scientist, JIMAR
Brent Stewart, Cooperating Scientist, Hubbs Sea World Research
Institute
Lee Ann Woodward, Cooperating Scientist, USFWS

Submitted by: _____

Mitchell P. Craig
Chief Scientist (October 17-November 5)

Submitted by: _____

Ray Boland
Chief Scientist (November 5-11)

Approved by:

R. Michael Laurs
Director, Honolulu Laboratory

Attachments